

AC 44 862

COUNTY BOROUGH OF BOOTLE.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR
1944.

F. T. H. WOOD, O.B.E., M.D. (Lond.), B.S., B.Sc., D.P.H.

Medical Officer of Health, School Medical Officer, Medical
Officer to the Public Assistance Committee, etc.

BOOTLE TIMES, 30, ORIEL ROAD.

1945.

HEALTH DEPARTMENT,

TOWN HALL, BOOTLE,

July 1945.

*To the Mayor, Aldermen and Councillors
of the County Borough of Bootle.*

MR. MAYOR, MRS. ALDERMAN SMITH, AND GENTLEMEN,

I have the honour to present the seventy-second Annual Report on the work of the Health Department, which, in accordance with the instructions of the Ministry of Health, is again curtailed.

Attention is directed to the following points of interest in the statistical records of the year:—

- (1) A further rise in the birth rate, which reached the highest level recorded since 1921.
- (2) A slight fall in the death rate, due mainly to a lower incidence of respiratory disease.
- (3) A fall in the infant mortality rate to the lowest level yet recorded in the Borough.
- (4) A low incidence of notifiable infectious disease, with no deaths from diphtheria or scarlet fever.
- (5) A fall in the death rate from tuberculosis, still leaving the rate, however, above the pre-war level.
- (6) Indications that the high incidence of syphilis recently recorded is now lessening.

REVIEW OF TWENTY-FIVE YEARS.

The submission of this Annual Report marks my completion of twenty-five years' service as Medical Officer of Health for the Borough and it may be appropriate to attempt a short review of public health circumstance during that time.

The twenty-five years have seen the figures of *population*, which at the census of 1921 numbered 76,508, wax and wane with an estimated maximum of 84,970 in 1922 and an estimated minimum of 46,100 in 1942; this last figure was a reflection of the position arising from the intensive air raids of the time when shortage of habitable dwellings and evacuation were at their peak, and the population last year was estimated to be 55,820.

During the period the Borough has consistently recorded a relatively high *birth rate* ranging from a maximum of 28·6 per 1,000 in 1920 to a minimum of 20·1 in 1938, with a war-time rise to 28·2 in 1944. The *death rate*, which was 17·1 per 1,000 in the decennium 1911-1920, averaged 13·5 throughout the next eighteen years, but the hazards of war interrupted the decline and the abnormal rate of 23·3 per 1,000 was recorded in 1941, a year signalised by intensive and severe air raids; lower rates have since been recorded and that for 1944 was 13·1. The excess of births over deaths, or the *natural increase* in population, has been of the order of 14,000 during the twenty-five year period, and this figure is also a measure of the extent of migration which has been necessary from an area which is fully built up.

Examination of the *causes of death* demonstrates the increasing importance of cancer, last year's experience being that one death in seven or eight was due to this cause as compared with one in fifteen in 1920; there is a compensatory alteration in proportion in respect of epidemic diseases, respiratory diseases, and tuberculosis, all of which were causing fewer deaths at the end than at the beginning of the period. This question of cancer mortality early received the attention of the Council and as from 1930 the principle of informal notification of hospital admissions and a degree of supervision and advice from the Department have been practised, and in 1943 the Council approved proposals for the immediate assumption of its powers and duties under the Cancer Act 1939 and became a partner in the Liverpool Cancer Control Organisation.

Consideration of *deaths by age groups* shows that the number of people surviving to the age of 65 has increased largely during the period, and that 40 per cent. of the deaths in Bootle at the present day are of persons aged 65 or over, whereas in the ten years ended 1920 the contribution to the death rate made by persons over 65 was only

20 per cent. There has also been a striking change in custom as to the care of the sick in terminal illnesses, for deaths in institutions comprised 63 per cent. of the total during the last three years as compared with 29 per cent. in 1920.

Notifiable infectious diseases throughout the period showed the usual waves of higher and lower incidence. The *scarlet fever* incidence for example was low for three years from 1925 and again during the last five years, but was at epidemic level in 1929 and in 1933; the type of disease lessened in severity, and whereas in the decennium 1911-20 the mortality rate from this cause was 0.11 per thousand, it was nil from 1939-44.

Diphtheria was at a very low ebb for four years from 1923 but there has since been a long period of high incidence interrupted by falls only in 1933, 1936 and 1944. The disease in general has been severe in type and as a cause of death ranked higher during the five years ended 1940 than it did in the ten years ended 1920; during the last three years, however, there have only been eight deaths from this cause, a record low figure for any triennial period.

Measles became a notifiable disease in 1940, but before then sufficient information was available from other sources to establish its history as a series of biennial epidemics which have hitherto not shown themselves susceptible to control. It is however satisfactory to note that the death rate from this cause fell from 0.37 per 1,000 in the decennium 1911-20 to 0.10 per 1,000 in the ten years ended 1944.

Enteric fever which figured prominently as a cause of disease and death in earlier years ceased to be an endemic disease locally in the early years of this century (note that the conversion of privies to water-closets was completed in 1906), and there were only sporadic cases during the period under review, except for a small outbreak of carrier borne disease spread from infected food in 1937. *Smallpox* too was absent except for eight cases in 1920.

Noteworthy improvements in *general sanitary administration* were effected in the early years of the period by taking and exercising powers for the abolition of fixed ash pits at some 10,000 houses, from which the household refuse was removed only at monthly intervals, and later by the erection of a new Refuse Disposal Works combining salvage

where possible with incineration where necessary. There have also been administrative improvements in the sanitary control of the *food supply*, although measures to render milk safe by pasteurisation were not extensively applied before the present war. The war period has also seen the practical application on a large scale of knowledge of the importance of vitamins in the national diet, and there has been a widespread distribution by the Ministry of Food of fruit juices and cod liver oil to young children and to expectant mothers.

Until the passing of the Local Government Act 1929 the provision of *general medical treatment* as distinct from that afforded by voluntary hospitals and private practitioners was the responsibility of the Poor Law Guardians, but that Act resulted in the dissolution of the West Derby Union and the transfer to the Council of responsibility for domiciliary medical attendance and hospital accommodation. The former duty was undertaken by the newly-created Public Assistance Committee and the latter was delegated to the Health Committee which, after consideration of a project for new hospital construction for the Borough, entered into an agreement expiring in 1950 for the reception by the Liverpool City Council in the hospitals transferred to them by the Act of sick persons chargeable to Bootle. In connection with domiciliary medical service it is worthy of mention that the "open choice" method of providing medical attendance was introduced into one of the three districts in the Borough in 1936 and has worked smoothly and economically since that date.

The incidence of *tuberculosis* here and in neighbouring areas has long been one of the unsatisfactory features of public health, although there are not wanting signs that the steady decline in the tuberculosis death-rate of the country generally is happening also in the borough; the death rate from this cause which was 1.82 per 1,000 in the ten years ended 1920 has fallen to 1.29 for the last five years. During the period, improvements were made in the Council's Tuberculosis Scheme by the opening in 1922 of a twenty-eight bed pavilion for late pulmonary cases (this pavilion was converted into a First Aid Post at the outbreak of war and was demolished by a direct hit in the air raids of 1941); by the adoption in 1924 of artificial pneumo-thorax treatment of selected cases; by the installation in 1925 of apparatus for ultra-violet light treatment; by the provision in 1932 of suitable dispensary premises, in which X-ray plant for screening and photographing was

installed in 1934; by the establishment in 1935 of a rent assistance scheme with some priority in letting houses for infectious cases of pulmonary tuberculosis; and by the introduction in 1943 of a scheme for financial assistance to patients under treatment.

As regards *venereal disease* there was an early decline in the incidence of syphilis from the two post-war years of 1919 and 1920 continuing until 1941 when there was a sharp rise; there was a more gradual fall in the incidence from gonorrhœa but there has been no subsequent rise during the present war, and it seems probable that this disease has been kept in check by the efficacy of the sulphonamide treatments recently introduced.

The Council's scheme for promoting *maternity and child welfare* has seen many extensions, and the health of mother and infant, as judged by declining rates of mortality and morbidity, has shown concomitant improvement. The *maternal mortality rate* has consistently been more favourable than that for the country as a whole, and the period under review has seen a continued decline—the rate for the first five years was 3·10 per 1,000 live births and for the last five years it has been 2·54.

The *infant mortality rate* which was 103 per 1,000 births at the commencement of the period showed a gradual decline year by year and the rate for the last three years was 70. The reduction in infant mortality may well be shown by comparing the actual number of infant deaths with the number which would have been recorded had the rate of mortality observed from 1911-20 still prevailed, when it can be calculated that there has been a saving during the period under review of 1,332 infant lives. Less satisfactory however was the course of the rate measuring the deaths of infants during their first four weeks which has remained virtually unaltered from the figure of 34·2 per 1,000 births which obtained from 1920-25. The fall in the infant mortality rate extended also to the death rate in the later years of childhood as is shown by the fact that the death-rate at ages 1-5 years was 16·7 per 1,000 in 1929 and was only 2·4 in the years 1942-44.

The successive expansions of the *Maternity and Child Welfare Scheme* have included the provision from 1921 onwards of dental treatment to expectant and nursing mothers; the establishment in 1922 of a municipal maternity home; the addition of further sessions for ante-

natal clinics and infant consultations at various dates; the availability from 1926 of obstetric consultants in domiciliary practice; the acceptance in 1929 from the Bootle Health Society of full responsibility for clinic administration; the institution in 1929 of post-natal clinics; the opening in 1932 of the specially-designed Health Centre; and the establishment in 1937 of a Municipal Midwifery Service.

The realisation of the fact that the maintenance of individual health lies at the base of national well-being, and of the corollary that systematic attempts must be made to instruct each individual as to methods of safeguarding his own health is another development of the period, and although *health education* must depend largely on the results of personal teaching by medical officers and nurses in clinic and home, the methods of commercial advertising must also be employed, and by leaflets, cinematographic films, press articles, broadcasting and other forms of public speaking, the public health message must be got home to the individual. All these methods have been followed locally, and such efforts have recently been reinforced by similar activities from the central departments.

My first annual report asserted that "*the matter of housing* is considered the most pressing question in measures for the promotion of public health; taking housing at its broadest and including in it not only the provision of a sanitary dwelling but also the securing for it of a decent environment it is clear that the satisfactory solution of this problem is necessary as a foundation on which to erect schemes to improve the health of the individual whether as infant, child, mother, industrial worker, or tuberculous patient." The lapse of twenty-five years has not detracted from the truth of this observation which indeed, in view of the present satisfactory economic position, is not now open to the criticism which might then have been made of the relegation to a secondary place of the need for a sound nutritional state of the people. It is right therefore to record that throughout the period the department has been closely concerned with the long struggle to provide more and better houses; elaborate surveys were conducted to determine the degree and extent of overcrowding, and every annual report testified to the continuing housing shortage. Systematic housing inspection and repair under the Public Health and Housing Acts did not cease until the outbreak of the present war, and were then succeeded by routine inspection and repair of war damaged houses; several Improvement Areas and one

Clearance Area were declared, the latter small in size and the only area falling to be dealt with under the statutory standards of the day. During the period under review some 2,672 houses were built by the Council under the successive schemes of the Government, and 1,282 were erected by private enterprise alone or aided by the Council on Corporation land, but the position at the present time—produced, or at least aggravated, by the destruction in air raids of 2,119 houses—is such that the Council has accepted the soundness of an estimate of existing need approximating to 3,000 houses, with an ultimate requirement, dependent on the extent to which desirable re-planning and re-development in the Borough conformable with larger regional development is economically possible, which may well add up to a figure of 7,000 houses.

The coming into force of the *Blind Persons Act* 1920 placed on the Council responsibility for promoting the welfare of its blind residents and a scheme was then prepared for the exercise of the Council's powers and duties in this connection. Since that date successive items of activity have been implemented from the scheme with the result that the Council now administers a service which employs two home teachers, provides the blind with education, training and employment, gives financial assistance to the unemployable blind and their dependents, provides a domiciliary medical service and a social centre, and has in hand the provision of a residential hostel.

The period also saw the birth, rapid growth and indications of the approaching end of *Civil Defence activities*, which from 1938 onwards took an increasing proportion of the time of the medical officers and other members of the staff in organising, supervising, and operating schemes for providing a Casualty Service to deal with victims of air raids or other enemy action, and for exercising medical supervision of the various and extensive schemes for evacuation. The Casualty Service scheme provided for 50 First Aid Parties and an Ambulance Service of 63 vehicles, four First Aid Posts, three Gas Cleansing Centres, and two Mobile Cleansing Units, and a Casualty Hospital (established by the evacuation of infectious patients from Linacre Hospital and the transfer of the vacated premises to Bootle General Hospital for the duration of the war), and at its peak employed a whole-time staff of 86 men and 119 women with a weekly wage bill of £571 17s. 7d., aided by a large part-time staff all of whom had to be recruited, trained, and exercised by the Council's medical staff with the assistance of local

medical practitioners. The full story of the achievements of the Casualty Service will be told elsewhere, and it suffices here to pay tribute to the permanent and the temporary staff and to the part-time personnel for their conduct throughout the long periods of "stand-by" interspersed with spells of arduous and dangerous operational activity.

The above retrospect is presented with due appreciation of what remains to be done before the unborn infant can be assured of a safe delivery, healthy infancy, childhood and adolescence, followed by the maximum span of productive maturity and by comfort in old age; towards these objectives public health workers and social reformers have been striving in this and preceding generations, and a realisation of what has been attained in the last twenty-five years constitutes a firm basis for confidence that the next quarter-century will see further progress in their attainment.

Results such as those recorded owe much of course to improvements in the educational and economic status of the people, but insofar as they may be ascribed to official action it is right that tribute should be paid to the work of the staff of the Department—medical, nursing, inspectorial and clerical—and to their assiduous devotion to duty. The staff now includes only seven individuals who were in the service in 1920, but grateful acknowledgment is made of the fact that the direction and supervision of the labours of these officials and of their colleagues of to-day and yesterday has been a pleasurable responsibility. Opportunity is also taken to record my gratitude to the present Chairmen of Committees which I serve, as well as to their predecessors and members of the Council in general, for their willingness to consider, and when judged possible, to act upon recommendations made to improve public health in the Borough.

I have the honour to be,

Your obedient servant,

F. T. H. WOOD,

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1944.

Civilian Population (Registrar-General's estimate) at mid-year							
1944	...	...	...	...	...	...	55,820
Area in Acres (exclusive of river bed)	...	...	...	...	...	...	2,414
Population at Census of 1931	...	...	...	...	...	...	76,770
Live Births—							
Males 835; Females 739	...	Total 1574.			Birth rate		28.2
Still Births—							
Males 29; Females 22	...	Total 51.	Rate per 1,000 total				
			(live and still) births				31.3
Total Deaths ...	732				Death rate		13.1
Number of women dying in, or in consequence of, childbirth—							
			Rate per 1,000 total				
		Deaths	(live and still) births				
Puerperal sepsis ...	...	1	...	...	...	0.61	
Other puerperal causes ...		3	...	...	...	1.84	
Number of deaths of Infants (under the age of one year)			...	...	...	96	
Death Rate of Infants under one year of age per 1,000 live							
births—Legitimate, 59; Illegitimate, 83	...	...	...	...	Total		61
Deaths from Whooping Cough (all ages) ...	...	...	...	...			7
Deaths from Diarrhoea (under 2 years of age) ...	...	...	...	...			13
Death Rate from Respiratory Tuberculosis per 1,000	...	...	...	...			1.00
Death Rate from all forms of Tuberculosis per 1,000	...	...	...	...			0.14

The Rateable Value of the Borough as at 1st April 1944 was £465,934
 The estimated product of a Penny Rate for 1944-45 ... £1,739
 In 1944-45 the General Rate was 15/11d. in the pound (excluding water
 rate and charges).

The cost of the Health Services during 1944-45 was estimated at
 £54,086, equivalent to a rate of 2s. 6.7d. in the pound.

COUNTY BOROUGH OF BOOTLE.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH

I.—VITAL STATISTICS.

Population.—At the Census in 1881 the population enumerated was 27,374; in 1891, 49,217; in 1901, 58,556; in 1911, 69,876; in 1921, 76,487; and in 1931, 76,770.

On 4th July 1945 the Registrar-General intimated that his estimate of civilian population at mid-year 1944 was **55,820**. This estimate shows that the population of the Borough last year was some 4,780 more than in the summer of 1943, and this increased figure is the lowest which can be accepted as consistent with the fact that the number of houses in occupation in the Borough rose during the past two years by 1,821.

Marriages.—The Superintendent Registrar has been good enough to furnish me with figures of marriages during recent years which show that the rise which occurred in the first two years of the war has been followed during the last two years by figures well below the normal. The totals for the eight years commencing 1937 have been 629, 653, 731, 891, 659, 576, 469 and 491 respectively.

Births.—During the year there were registered 1,574 births to Bootle parents, representing a birth rate of **28.2 per 1,000** of the population, that for England and Wales being 17.6. In 1943 the Bootle birth rate was 26.5 and for the decennium 1934-43 it was 22.4. There

were 835 male and 739 female births. It will be noted that the birth rate, which reached a post-war maximum of 29.7 in the first quarter of 1920 and its minimum in 1938, shows a further rise again this year.

Period.	BOOTLE.		ENGLAND & WALES. Rate per 1,000.
	Total Births.	Rate per 1,000.	
1873—1880 ...	6,846	38.6	35.4
1881—1890 ...	15,508	36.8	32.4
1891—1900 ...	17,716	33.2	29.9
1901—1910 ...	20,468	32.3	27.2
1911—1920 ...	20,748	27.6	21.8
1921—1930 ...	18,884	22.8	18.4
1931—1935 ...	8,367	21.8	15.0
1936—1940 ...	7,959	21.6	14.9
1941 ...	1,199	22.8	14.2
1942 ...	1,104	23.9	15.8
1943 ...	1,327	26.5	16.5
1944 ...	1,574	28.2	17.6

The illegitimate births numbered 120, and were 7.6 per cent. of the total. In 1943 the total number was 88, and in 1942, 69.

Deaths.—The total number of deaths of Bootle residents during 1944, whether within or without the Borough, was 732; this figure includes 65 who died in institutions within the Borough, 285 who died in transferred institutions in Liverpool, 66 who died in hospitals outside the Borough, and 3 who died in mental hospitals, making a total of 419 deaths in institutions.

The age and sex constitution of the present population of Bootle differs appreciably from that of peace time, and consequently the war-time death rates are not truly comparable with those of earlier years. The calculated rate of **13.1 per 1,000**, however, represents an improvement from the rate of 14.9 per thousand recorded in 1943.

The crude death-rate of the 126 great towns of England and Wales during 1944 was 13·7.

Period.	BOOTLE.		ENGLAND & WALES.
	Total Deaths.	Rate per 1,000.	Rate per 1,000.
1873—1880 ...	3,823	21·7	21·2
1881—1890 ...	8,260	19·9	19·1
1891—1900 ...	10,942	20·6	18·2
1901—1910 ...	11,400	17·8	15·4
1911—1920 ..	12,470	17·1	14·3
1921—1930 ...	10,336	13·5	12·1
1931—1935 ...	5,212	13·5	12·0
1936—1940 ...	5,019	13·8	12·5
1941 ...	1,227	23·3	12·9
1942 ...	629	13·6	11·6
1943 ...	745	14·9	12·1
1944 ...	732	13·1	11·6

The death-rate during the first quarter of the year was 14·9, during the second 12·2; the third, 11·9; and the fourth, 13·2.

The number of deaths which occurred in institutions was 419, *i.e.*, 57·2 per cent. of the total deaths, as compared with 59·6 per cent. in 1943, and 72·5 per cent. in 1942. The increasing use made of institutions for the accommodation of cases of terminal illness is illustrated by a comparison with the percentage of 29 in 1920.

Infantile Mortality.—There were 96 deaths of infants, compared with 101 in 1943, and 80 in 1942. The infantile mortality rate was **61 per 1,000 births**, compared with 76 in 1943, and 79·6 in the decennium 1934 to 1943.

The rate of infantile mortality amongst males was 63, and amongst females 58. Throughout England and Wales the rate of infantile mortality was 46 per 1,000 births, and in the 126 great towns it was 52.

Twenty-nine infants died before they were a week old, and a total of 46 or 48 per cent. of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 18·4 per 1,000 births.

Young Child Mortality.—There were 17 deaths of children aged 1 to 5 years, as compared with 14 in 1943. The principal causes were—violence 3, meningitis 3, and two deaths each from measles, whooping cough, pneumonia, and congenital defects.

Uncertified Deaths.—Eighty-six deaths (50 of residents and 36 of non-residents) were the subject of a Coroner's inquest, and in only four cases was the death registered without certification by a medical man or a Coroner.

CAUSES OF DEATH.

The causes of death, classified according to age, are shown in the table on page 45.

Epidemic Diseases.—The epidemic diseases (excluding influenza) were responsible for 22 deaths, as compared with the average of 44.7 during the preceding ten years. There were 2 deaths from measles, as against none in 1943; no deaths from diphtheria, as against 3 in 1943; 7 deaths from whooping cough, as against 2 in 1943, and none from scarlet fever or typhoid fever. The deaths from diarrhoea and enteritis were 13 as against 18 during 1943; all were infants under one year.

Respiratory Diseases.—The number of deaths from respiratory diseases was substantially lower than that recorded in the preceding year. Pneumonia was responsible for 58 deaths, bronchiitis for 29, and other respiratory diseases for 3, making the total deaths from respiratory diseases (excluding influenza and tuberculosis) 90, or 12.3 per cent. of the total deaths at all ages, as compared with 133, or 17.9 per cent. in 1943. Influenza was recorded as a cause of death in 4 cases, as against 19 in the preceding year.

Cancer.—Cancer was registered as the cause of death in 102 cases, as compared with 88 in the preceding year. This represents a cancer crude death-rate of 1.83 per 1,000 of the population as compared with 1.01 during the years 1911 to 1920, with 0.78 per 1,000 during the first ten years of this century, and with 0.55 during the ten years 1891 to 1900.

Violence.—There were 83 deaths from violence, and 4 from suicide.

ECONOMIC CONDITIONS.

Valuable information as to economic conditions having a bearing on the health of the town is obtained from data kindly supplied by the Clerk to the Public Assistance Committee, and by the Clerk to the Bootle Insurance Committee.

During the year ended 30th December 1944, £27,184 was expended in outdoor relief, including £198 to unemployment cases (comparable figures for 1943 were £21,763 and £98). Further, the annual return of persons in receipt of Poor Relief on the night of 30th December 1944 shows 512 persons to have been in receipt of institutional relief, of whom 79 were persons not suffering from sickness, accident, or bodily or mental infirmity, and 923 persons to have been in receipt of domiciliary relief. The total number of persons in receipt of Poor Relief on 31st December 1944 was equivalent to 257 per 10,000 of the population, as compared with 301 in 1943.

Returns of the Ministry of Labour showing the numbers of insured men and women as unemployed and resident in the Borough are not now supplied, but the following table summarises available information as to unemployment and public assistance during recent years, and shows the number in receipt of domiciliary relief last year to be a record low figure:—

Year.	Approximate monthly average of unemployed adult males.	Persons in receipt of relief on 1st January.		Total cost of outdoor relief.
		Institutional	Domiciliary	
1931	7598	475	2864	47,865
1932	7013	375	3936	64,990
1933	6926	455	5659	82,843
1934	6476	431	6871	107,807
1935	6780	410	7270	113,130
1936	6389	548	6751	109,747
1937	5146	511	6586	74,727
1938	5051	480	4354	60,307
1939	4310	464	4124	58,982
1940	—	357	2992	53,104
1941	—	413	1775	25,544
1942	—	412	1092	20,581
1943	—	471	1036	21,763
1944	—	512	923	27,184

The total number of insured persons in the Borough on 1st January 1945, was 29,532 or 53 per cent. of the total civilian population. There was a slight fall in the number of prescriptions for insured persons made up during the year. It will be recalled that the number of these prescriptions dispensed rose from 50,738 to 164,253 between 1921 and 1937, with a corresponding increase in the annual cost of medicines from £1,955 to £5,149 6s. 5d., while this year the experience is 112,849 prescriptions at a cost of £5,161 7s. 0d.

II. GENERAL PUBLIC MEDICAL TREATMENT.

The control of the transferred medical services remains with the Public Assistance Committee, although in November 1931 the Council delegated to the Health Committee the powers contained in Part I of the Local Government Act, 1929, with respect to the provision of hospital accommodation.

INSTITUTIONAL ACCOMMODATION FOR THE SICK.

By agreement continuing until April 1950 arrangements have been made for the reception of Bootle sick into the hospitals transferred to the Liverpool City Council after the passing of the Local Government Act, 1929. Admissions during the year numbered 3,257 (including 561 births and 1,325 admissions on Masters' or Medical Superintendents' Orders).

DOMICILIARY MEDICAL ATTENDANCE.

The administration of medical out-relief included in the functions transferred to the Council on 1st April 1930 is controlled by the Public Assistance Committee acting through the Medical Officer of Health, and the arrangements remain as described in earlier reports.

Examination of the returns of surgery consultations and home visits during the year showed that the work remained relatively light, the weekly average having been 29 surgery consultations and 6 home visits in Districts 1 and 2, and 45 surgery consultations and 15 home visits in District No. 3.

CANCER SCHEME.

Under the Cancer Act, 1939, the Council became responsible, in regard to patients suffering from cancer, for seeing that the following are provided: diagnostic facilities; adequate and efficient treatment both by surgery and by radiotherapy; a follow-up scheme with the necessary statistical records; suitable popular education or propaganda measures. It was also indicated that authorities should collaborate in joint action and with such existing organisations as already provide facilities either wholly or partially.

As noted in the last Annual Report the Council's interim proposals for the provision of these facilities were approved by the Ministry of Health on 22nd February 1944.

In brief, the Council determined to make the necessary provision by arrangement with the Liverpool Cancer Control Organisation, which is a body representing all the institutions and organisations engaged in the diagnosis and treatment of cancer in Liverpool and Bootle and on the governing body of which the Council is represented. The Liverpool Radium Institute and certain voluntary and municipal hospitals are employed by the Organisation in the working of such arrangements, which include the provision of a Radiotherapeutic Centre, deep X-ray therapy departments, consultative clinics, and arrangements for the use of Radium and Radon, in-patient accommodation in certain hospitals, and the establishment of a Clinical Register and a Pathological Register.

Under these arrangements 33 persons received in-patient treatment at voluntary hospitals during 1944 at an estimated net cost of £237 7s. 10d.; in addition, 42 persons were treated at approved municipal hospitals.

VACCINATION.

According to information supplied by the Vaccination Officer, 1,017 successful primary vaccinations and four successful re-vaccinations were performed during the year ended 30th September 1944, as compared with the previous year's figures of 974 and two respectively.

AMBULANCE SERVICE.

Until 15th December 1944 the Accident and Sickness Ambulance Service continued to be operated by a rota of drivers and attendants drawn from the whole-time personnel of the Civil Defence Rescue Service. As from that date, however, the whole-time employment of Civil Defence personnel terminated and the service has since been worked by one supervisor and fourteen male drivers and attendants working as two teams in three eight-hourly shifts. This establishment of an *ad hoc* Ambulance Service was undertaken by the Council only after the resultant uneconomic employment of labour had been represented to the Government Departments concerned and alternative methods of providing the Service had been disapproved.

During the year the Service answered 3,606 calls, as under:—

	Day.	Night.	Total.
Hospital "transfers" ...	— ...	— ...	1891
Accidents—			
Docks	507 ...	140 ...	647
Elsewhere	510 ...	222 ...	732
Sickness	171 ...	124 ...	295
Maternity	33 ...	8 ...	41

III. SANITARY CIRCUMSTANCES.

WATER SUPPLY.

Bootle is within the area of supply of the Liverpool Corporation Water Undertaking. The supply is by gravitation from upland sources in North Wales and Lancashire, is constant and, generally speaking, all premises are supplied from the mains of the Undertaking. During the year the supply has been adequate in quantity and first-class in quality; bacteriological examinations are made daily within the area of supply, and the supplies both from Rivington and Lake Vyrnwy are treated through slow sand filters and chlorinated. The water supply generally is not plumbo-solvent.

SANITARY INSPECTION OF THE DISTRICT.

Nuisances.—The number of nuisances for which notices were served on owners and occupiers was 6,500, as against 6,034 in 1943.

Prosecutions: Non-abatement of Nuisances, Public Health Act, 1936, Section 93.—During the year 15 prosecutions were undertaken against owners of house property for non-compliance with abatement notices served upon them. In each case the Magistrates made an order for the nuisances to be abated in a specified time and imposed fines amounting in all to £35 0s. 0d.

In the first three months of 1945 further 31 prosecutions were undertaken, resulting in orders being made for abatement of nuisances and involving the defendants in fines totalling £123 0s. 0d.

Legal proceedings are instituted only after owners have been given every opportunity of complying with the abatement notices served upon them and have failed to do so, but the prosecutions have proved salutary and have resulted in a general speeding up, by landlords, of repairs to house property.

Fertilisers and Feeding Stuffs Act, 1926.—Five samples of feeding stuffs and seven samples of fertilisers were obtained during the year.

Canal Boats.—During the year 46 visits of inspection were made to canal boats on the Leeds and Liverpool Canal in the Borough. Four written notices were served during the year, and six infringements were remedied. Bootle is not a Registration Authority under the Public Health Act, 1936 (Sec. 249).

Verminous Infestation.—The procedure adopted for dealing with dwelling-houses infested by bed bugs has been described in previous Annual Reports and during the year 50 municipal houses and 24 privately-owned houses required and received disinfection.

The special arrangements described in the last Annual Report for the temporary removal of tenants from houses where disinfection could not otherwise be effected were followed in thirty-seven cases; after return, periodical inspections are made both by a Sanitary Inspector and the Housing Estate Manager, and during the year no instance of re-infestation was found, and a general improvement in the standard of cleanliness was effected.

Houses found to be infested by cockroaches were also dealt with as described in earlier reports, and 112 municipal houses and 3 privately-owned houses were so treated during the year.

RAT INFESTATION.

The receipt of a direction under the Infestation Order, 1943, and the inauguration at the end of that year of a systematic campaign against rat infestation were noted in the last Annual Report, and an outline was then given of the methods to be employed by the Chief Sanitary Inspector in the control of this new work. The first survey of lands and buildings in the Borough was completed in May 1944 by the special temporary staff engaged, and the Chief Sanitary Inspector reports as follows on the year's work:—

Inspections.—A total of 17,037 lands and buildings was inspected, comprising 15,500 dwelling houses, 775 factories and shops including food shops and stores, 317 cleared or uncleared bombed sites, 69 warehouses, 115 schools, churches, halls or offices, 59 licensed premises and 202 other premises, including stables, piggeries, etc.

Conditions Found.—Of the 17,037 lands and buildings included in the above categories, a total of 384 was found to be infested with rats or mice, 253 by rats and 131 by mice, the latter being found chiefly in dwelling houses, schools and offices, etc. Of the dwelling houses visited 173 showed evidence of infestation, 53 by rats and 120 by mice; at one dwelling house only was there evidence of rats nesting, in every other case the evidence was that the rat infestation was due to migrants; the 69 warehouses were all found to be infested, chiefly by the black rat. Only 8 of the bombed sites were found to be infested. The group of premises which included factories and shops showed the existence of rats at 75; in most of the food shops and stores the black rat predominated.

Destruction.—The staff of operators treated 228 of the total of 384 infestations found, by arrangement with the occupiers of the lands and buildings concerned. In the remaining instances the infestations were treated by Servicing Companies or by the occupiers, and preventive measures taken by them were carefully followed up. Poison baits laid by the operators totalled 8,147, of which 3,307 were taken by the rodents.

Conditions Found on Re-Survey.—A re-survey was undertaken commencing in May and completed in November. All the lands and buildings previously surveyed were re-visited. The total number of such lands

and buildings found to be infested was 255. As a result of this survey the number of dwelling houses found to be infested dropped to 77 and the only buildings which did not show a satisfactory reduction in the degree of infestation were the 69 warehouses. Special attention was directed to these premises, the owners of which recruited and trained a staff of rodent operators who later undertook systematic treatments at the warehouses on modern lines as laid down by the Ministry of Food. In these operations the Department's operators co-operated fully.

The staff of operators treated 73 of the total 255 infestations found, the remainder being treated as previously described. 896 poison baits were laid by the staff, of which 375 were taken by the rodents.

Destruction of Sewer Rats.—With the co-operation of the Borough Engineer, baiting sewer manholes throughout the Borough was commenced in August and completed in December. The manholes totalled 2,439 and were grouped into three areas for treatment in rotation. Out of the total number of manholes 2,191 were baited. At 2,105 manholes, which included Areas No. 1 and 2, the prescribed treatments, two in number, were carried out, the second treatment following four weeks after the first treatment, but in the 86 manholes comprising Area No. 3, all being in or near the Corporation Housing Estates, no pre-bait was taken, in consequence of which poison bait was not laid. In 248 manholes no baiting was carried out, on account of the manholes being subject to tidal flooding, to heavy concentrations of gas, or to being over swift running sewers. The total number of baits laid was 4,296 with 1,106 takes of pre-bait and 958 of poison bait. The estimated number of rats destroyed was 12,921, and although only 169 bodies were recovered, independent observers reported large numbers washed out of the main sewer outfall by the Gladstone Dock.

IV. SANITARY CONTROL OF THE FOOD SUPPLY.

MILK SUPPLY.

Source of Milk Supply.—That portion of the milk supply of the Borough not brought by rail or road is derived from cows kept in shippings, of which there are now owing to war conditions only two in

the town; the cows number 28, three more than last year, as compared with a figure for 1914 of about 550. The shippers received the careful attention of the Inspector, who paid in all 21 visits.

Dairies and Cowsheds.—Milk and Dairies Regulations 1926 to 1943.—There are 25 premises registered as dairies or milkshops in the Borough, and 2 premises registered as cow-sheds, and there are 46 registered retail purveyors of bottle milk only. One hundred and eighty visits of inspection were made to cowsheds, dairies and milkshops during the year; on the whole it may be said that these premises are maintained in a satisfactory state.

Cleanliness and Safety of Milk.—The Milk (Special Designations) Orders 1936-1943, prescribe the following special designations for milk, namely:—Tuberculin Tested, Accredited, and Pasteurised.

At the end of 1944 there was one Bootle dairyman holding a licence to produce Accredited Milk, three to produce Pasteurised Milk, and two were holding a Dealers' licence in respect of Pasteurised Milk.

With the object of promoting the cleanliness and safety of the local supply bacteriological examination of milk samples has not been limited to the designated milks, and 75 examinations in all were made during the year.

Milk and Tuberculosis.—The results of bacteriological examination of 53 samples of milk showed that one sample was infected with tubercle bacilli; appropriate action was taken.

Pasteurised Milk.—During the past year in Bootle three licences were renewed for the production of pasteurised milk. The number of milk samples obtained from these three licence holders during 1944 was 23, of which 12 conformed to the requirements of the Ministry of Health. Thirty samples of pasteurised milk were submitted for examination by the phosphatase test; all were found to be efficiently pasteurised.

MEAT AND OTHER FOODS.

Butchers' Shops, etc.—Supervision of the materials and methods in foodshops, bakehouses, and factories, continued to be exercised by the Department on lines as indicated in previous Annual Reports.

Food and Drugs Act 1938.—The Public Analyst, to whom samples are submitted, is Mr. W. H. Roberts, M.Sc., F.I.C.

During the year 215 samples were taken, of which 29, or 13·5 per cent., were adulterated or not up to standard. One hundred and twenty-eight of these were taken informally, and in cases where adulteration was detected formal samples were subsequently obtained in order that the necessary legal action might be instituted. One hundred and twenty-eight samples of milk were obtained, of which forty-three were taken informally; in the other 85 cases, however, the procedure prescribed by the Act was carried out. Twenty-one of the samples of milk (4 formal, 17 informal) were found to be adulterated.

In respect of four formal samples of milk found to be adulterated legal proceedings were instituted in one instance, which was in respect of milk containing six per cent. added water; the vendor was fined £5 with £1 1s. 0d. costs. In the remaining cases the adulteration was slight and the vendors were interviewed and cautioned.

Legal proceedings were instituted in two instances for contraventions of Section 11 of the Pharmacy and Medicines Act, 1941; both cases were dismissed under the provisions of Probation of Offenders' Act on payment of £2 2s. 0d. costs in each case.

The total number of samples obtained of milk produced outside the district was 114, of which 66 were taken in course of delivery.

Public Health (Preservatives, etc., in Food) Regulations, 1925-1927.—A total of 175 samples was examined under these Regulations for the presence of preservatives, including 128 of milk. All the samples, with one exception, were found to be correct.

V. PREVALENCE OF INFECTIOUS DISEASES.

The number of cases of infectious diseases notified during the year is summarised below.

There was no notification of small-pox, cholera, plague, typhus fever, relapsing or continued fever, trench fever, poliomyelitis, or encephalitis lethargica.

			Cases notified.	Cases admitted to hospital.	Deaths.
Enteric Fever	...	...	3	3	—
Scarlet Fever	...	...	178	87	—
Diphtheria	...	...	108	107	—
Ophthalmia Neonatorum	...	...	1	1	—
Erysipelas	...	...	14	2	1
Measles	...	...	457	5	2
Whooping Cough	...	...	154	9	7
Infantile Diarrhoea (under two years) voluntarily notifiable	...		7	—	13
Acute Primary and Influenza Pneumonia	...	...	64	12	25
Cerebro-Spinal Meningitis	...	...	6	4	3
Dysentery	...	...	5	5	—
Puerperal Pyrexia	...	...	1	1	4
Malaria	...	...	1	1	—
*Tuberculosis—					
(a) Pulmonary	...	...	135	67	56
(b) Non-Pulmonary	...	...	27	9	8

* Primary notifications.

ENTERIC FEVER.

Two cases of typhoid fever and one case of paratyphoid fever were notified during the year; all were admitted to hospital where the diagnosis was confirmed.

SCARLET FEVER.

Incidence.—The total cases for the year rose from 130 in 1943 to 178 (seven of these were re-classified later), constituting an incidence of 3·2 per 1,000 of the estimated population. There were no deaths.

In each of eight houses two cases of scarlet fever occurred, and in three houses there were three cases.

Hospital Isolation in Scarlet Fever.—Eighty-seven cases, representing 49 per cent. of the notifications, were admitted to the Liverpool Isolation Hospitals during the year.

DIPHTHERIA.

Incidence.—There was a large fall in the incidence of diphtheria from the figure of the previous year, and in all 108 cases were notified (54 were re-classified later) as compared with 224 during 1943, and an average of 257 for the ten years ended 1943. The notification rate was 1.9 per 1,000 of the estimated population, and the case fatality was nil.

One hundred and seven of those notified were removed to Liverpool Isolation Hospitals during the year.

The occurrence of a secondary case of diphtheria in an infected household was recorded on one occasion, and the occurrence of a third case on two occasions.

Mortality.—There were no deaths from diphtheria during the year.

Prevention.—During 1932 a scheme was inaugurated whereby an offer of immunisation against diphtheria was made to the parents of infants and young children in the Borough. Last year, a total of 1,172 children (compared with 1,713 during 1943) completed the series of inoculations, making with those inoculated in preceding years a grand total of 12,601.

The following table shows year by year, since the inauguration of the scheme, the number of children completing the series of inoculations:—

DIPHTHERIA IMMUNISATION.

Age at date of inoculation.	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	Total.
Under one year	—	—	—	1	—	1	3	3	2	1	4	4	48	
1-2 years	6	5	36	34	31	32	46	44	43	45	196	314	459	
2-3 ,,	12	11	39	75	40	48	46	46	46	64	239	250	157	Under five years
3-4 ,,	15	22	62	70	47	46	33	49	29	108	208	156	74	2049
4-5 ,,	18	28	43	55	46	35	33	37	22	76	209	193	100	
5-6 ,,	142	242	311	279	278	191	334	66	15	213	405	338	221	
6-7 ,,	237	224	194	267	232	261	190	199	4	440	290	135	71	5-10 years
7-8 ,,	45	242	35	40	21	40	23	10	6	115	135	56	16	3819
8-9 ,,	4	62	12	10	14	12	.9	7	3	44	101	52	9	
9-10 ,,	2	20	9	6	4	3	1	6	—	28	52	41	5	
10-11 ,,	1	1	3	10	7	4	4	1	1	45	90	52	4	
11-12 ,,	—	2	5	10	4	1	4	4	1	50	56	45	3	
12-13 ,,	—	1	1	4	7	2	—	1	—	38	80	38	—	10-15 years
13-14 ,,	—	—	3	2	4	—	1	—	—	36	96	22	4	8726
14-15 ,,	—	—	1	—	1	—	—	—	—	30	58	15	—	
15 years & over	—	—	—	—	—	—	—	—	—	—	28	2	1	2614
Age not known	100	120	19	2	76	29	20	5	—	9	13	—	—	393
TOTALS	582	980	773	865	812	705	747	478	172	1342	2260	1713	1172	12,601

OTHER NOTIFIABLE DISEASES.

Acute Primary and Influenzal Pneumonia.—Sixty-four notifications of primary and influenzal pneumonia were received. Four deaths from influenza and 21 from primary pneumonia were recorded.

Measles.—Under the Measles and Whooping Cough Regulations, 1940, 457 cases of measles were notified; there were two deaths.

Whooping Cough.—Whooping Cough caused seven deaths during 1944, compared with 2 in 1943 and 2 in 1942. The death-rate was 1·3 per 1,000 of the population, compared with 0·03 throughout England and Wales. The number of cases notified during the year was 154; one case was re-classified.

Diarrhoea.—Deaths from this disease numbered thirteen, or a rate of 0·23 per 1,000 of the population, as compared with 0·36 last year. All of the deaths occurred in infants under one year of age, giving a rate per 1,000 births of 8·3 in Bootle.

VI. TUBERCULOSIS.

Notification Register.—The register on 31st December 1944 included 239 males and 266 females suffering from pulmonary tuberculosis, and 98 males and 117 females suffering from non-pulmonary tuberculosis, making a total of 720 cases, as compared with 757 at the end of 1943 and 751 at the end of 1942.

Incidence.—The total number of new cases notified during the year under the Public Health (Tuberculosis) Regulations 1930 was 162 (135 pulmonary and 27 non-pulmonary), as compared with the figures of 201, 184, 162, 150, 142, 169 and 186 in the years from 1937 onwards.

Mortality.—The number of deaths caused by tuberculosis during 1944 was 64, or one death in every eleven, giving a death-rate from this cause of 1·14 per 1,000 of the population, as compared with 1·28 in 1943, and 1·37 in 1942; it was 1·24 for the ten years ended 1943. The recorded figure is thus still above the experience of the years immediately before the outbreak of war, although there has been consistent improvement since the unfavourable figures of 1941.

Period.	Bootle		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1891-1900	...	1106	2.01
1901-1910	...	1127	1.65
1911-1920	...	1870	1.42
1921-1925	...	652	1.08
1926-1930	...	572	0.94
1931-1935	...	537	0.81
1936-1940	...	411	0.67
1941	...	85	0.73
1942	...	63	0.65
1943	...	64	0.67
1944	...	64	0.63

Dispensary Register.—A register is maintained of all cases of tuberculosis receiving public medical treatment. On 31st December 1944 the number of definite cases on the register was 442, as against 448 on 1st January 1944.

PULMONARY TUBERCULOSIS.

Incidence.—One hundred and thirty-five new cases suffering from pulmonary tuberculosis were notified during 1944, an increase of 22 over the previous year; the number includes 23 cases not formally notified. The numbers notified in the five preceding years were 115, 121, 105, 133, and 157 respectively. In the case of five the first intimation was obtained from the death returns, while in eleven other cases notification was made at intervals of less than three months before death. The non-notified deaths, therefore, numbered 8.9 per cent. of the total of 56 deaths from pulmonary tuberculosis.

Mortality.—During the year 56 deaths were certified to be due to pulmonary tuberculosis, representing a rate of 1.00 per 1,000 of the population, as compared with 1.14 in 1943, and 1.19 in 1942. There were 33 deaths among males and 23 among females.

Chest Clinic.—During the year the Tuberculosis Officer examined 375 patients newly referred; 292 patients were sent by private practitioners, 9 by the Maternity and Child Welfare Clinic Medical Officers, and 8 by the Lancashire County Council mass radiography unit, 26 by

Army Medical Boards, and 40 by the School Medical Officers for opinion preliminary to notification. Attention continued to be paid to securing the attendance for examination of contacts of notified cases, and during the year 73 were so examined.

The total attendances at the Clinic during the year numbered 2,609, and 2,169 visits for various other purposes were made in addition; 516 specimens of sputum were examined, giving a positive result in 63 cases. The Tuberculosis Visitors made 1,040 visits to homes of tuberculous patients.

During the year 703 X-ray examinations were made at the Bootle General Hospital.

Maghull Sanatorium.—During the year 28 patients were admitted to the Sanatorium with an average length of stay of 200 days for the 29 cases discharged during the year. At the end of the year there were 9 males and 6 females in the Sanatorium. In addition, 39 other cases were admitted to hospitals outside the Borough, owing to the non-availability of the pulmonary tuberculosis beds at Linaere Hospital.

MAINTENANCE ALLOWANCES.

The Ministry of Health, in April 1943, issued Memorandum 266/T on the Government's scheme for tuberculosis authorities to grant allowances to certain classes of patients suffering from pulmonary tuberculosis and to their dependants. The object of these allowances, which are refunded by the Government, it is primarily to assist those patients who, on the advice of the tuberculosis officer, give up remunerative work in order to undergo treatment.

As the allowances are provided for the purpose of securing suitable treatment, they are conditional on a patient undergoing the form of treatment prescribed, whether in an institution or at home, conforming to any advice given to him for preventing the spread of infection, and attending at the Chest Clinic for examination as required.

During the year 86 applications for maintenance allowances were granted, the total disbursed amounting to £2,305 4s. 3d. In addition special payments were made for the provision of pocket money to patients in sanatoria, and with these and other allowances the total expenditure was £2,391 0s. 3d.

NON-PULMONARY TUBERCULOSIS.

During the year 27 new cases of non-pulmonary tuberculosis were notified, as compared with 29 in 1943 and 36 in 1942, namely:—8 bones and joints, 8 glands, 6 meninges, and 5 other sites; and there were eight deaths registered. The agreement with the Leasowe Hospital for Children for the maintenance of beds for children suffering from non-pulmonary tuberculosis remained in force, and at the beginning of the year eight cases were in hospital; 2 cases were admitted, 5 were discharged, and 5 were remaining in hospital at the end of the year.

The scheme for admission to general or special hospitals of cases of non-pulmonary tuberculosis, and for payment by the Council of the charges for maintenance and treatment in cases recommended or approved by the *Tuberculosis Officer*, was continued; during the year 7 such patients were admitted.

Public Health (Prevention of Tuberculosis) Regulations, 1925.—No action was taken under the above Regulations relating to tuberculous employees in the milk trade.

Public Health Act, 1936: Section 172.—No action was taken under this Section dealing with the compulsory removal of cases of tuberculosis to hospital.

VII. VENEREAL DISEASES.

The Council's scheme for the treatment and control of Venereal Diseases remains as described in previous reports, and there was a sustained national and local publicity campaign directed to secure the avoidance of infection or alternatively the continuance of efficient treatment.

The Annual Statistical Report of the Medical Officer of the Treatment Centre shows 590 persons under treatment on 31st December 1944, as against 459 on 1st January 1944, and a further increase in new cases, the figure being 421 as contrasted with 379 in 1943.

The total attendances for treatment made at the Centre during the year show a small decrease from 12,436 to 11,668; the figure includes 2,261 attendances made between clinic days for the treatment of gonorrhoea at the irrigation centre. The average attendance at the male clinics was 32, and at the female clinics 28. During 1944 198 cases were discharged on completion of treatment and observation, as against 97 in the previous year.

The following table is a statement of the number of cases presenting themselves for treatment during the last six years:—

BOOTLE VENEREAL DISEASES CLINIC.

	1939	1940	1941	1942	1943	1944
New Cases (total)	272	284	315	307	379	421
New Cases (syphilis)	50	41	78	101	104	89
New Cases (gonorrhoea)	130	129	129	115	113	117
Total attendances, excluding Irrigation Department)	8492	6789	5302	7071	9167	9407
Irrigation Department attendances ...	2447	1273	1573	2627	3269	2261
In-patient Days	76	Nil	41	132	176	178
No. discharged after completion of observation and treatment	102	124	124	85	97	198
No. who ceased to attend after completion of treatment, but before final tests as to cure	61	21	26	1	1	1

Bootle residents accounted for 40 per cent. of the cases under treatment at the Bootle Hospital Centre, the Authorities contributing the next largest numbers of cases being Liverpool with 23 per cent. and the Lancashire County Council with 17 per cent.

Advantage has continued to be taken of intimations of suspected sources of infection to endeavour to bring the infecting agent under treatment, and in addition the clinic staff engaged on this duty have improved the "follow-up" practice by visiting persistent defaulters from treatment to persuade them to receive attention; during 1944, 262 such visits were paid to 245 defaulters, and resumption of attendance was secured in 163 of these cases.

Under Defence Regulation 33B calling for notification of "contacts" of cases of venereal disease eight Forms I. were received, and in five instances the contact was found and attended for examination; there were no cases in which two or more Forms I. were received in respect of the same person.

VIII. MATERNITY AND CHILD WELFARE.

EVACUATION.

There was no occasion during the year for any large scale evacuation of mothers and young children, but there remained a steady acceptance of the arrangements described in previous reports for the temporary transfer to institutions in the Fylde area of mothers for their confinement and of the children under five years of age belonging to those mothers. During the year ended 31st December 1944 88 expectant mothers and 51 children under five were so evacuated; in addition 4 children under five, with special home circumstances, were admitted for indefinite stay in residential nurseries elsewhere.

ASSISTANCE FROM SPECIAL CHARITABLE FUNDS.

This scheme, outlined in previous reports, continued throughout the year. Although the number of applicants fell considerably, additional 33 perambulators were issued, making a gross total of 202 since inception.

ANTE-NATAL AND POST-NATAL SERVICES.

Home Visiting of Expectant Mothers.—Much can be done to promote normal childbirth by careful instruction as to general and personal hygiene and as to the need for suitable food, open air, exercise and rest, adequate sleep, and properly devised clothing. The Health Visitors paid 1,230 home visits and the Municipal Midwives paid 2,455 home visits to expectant mothers.

Ante-Natal Clinics.—Four Ante-Natal Consultations were held each week. During the year 1,008 new cases attended, corresponding to 63 per cent. of the total registered births; in addition, 280 cases carried over from the preceding year continued under supervision, and a total of 4,568 attendances was made, with an average of 22.7 persons per consultation. Further, it should be noted that patients intending to enter Walton Hospital for confinement usually attend the Ante-Natal Clinic held at that Institution.

Dental Treatment of Expectant and Nursing Mothers.—At the end of the year two half-days weekly were being devoted to the dental treatment of expectant and nursing mothers and the treatment given during the year has been in the nature of extractions and the supply of artificial dentures.

The number of patients treated during the year was 143, as compared with 119 in 1943, and the estimated cost of dentures supplied was £82 13s. 0d., of which the patients' contributions were assessed at £48 4s. 6d.

MATERNAL WELFARE.

The Rules of the Central Midwives' Board require medical help to be sought by the midwife in all cases of illness of the patient, or the child, or of any abnormality occurring during pregnancy, labour, or lying-in, and 132 records of sending for medical help were received.

The Local Supervising Authority is responsible for the payment of fees to doctors called in by midwives, and in 1944 80 accounts, totalling £122 6s. 6d., in respect of cases where the doctor himself was unable to recover the fee, were sent in, as compared with 65 accounts, totalling £105 10s. 0d., in 1943. Of this sum, the contributions to be recovered from the patients were assessed at £60 12s. 6d.

Milk Assistance Scheme.—The Council's Milk Assistance Scheme, under which dried milk is granted to expectant mothers and infants, was continued in full until 21st August, 1940, on which date the scheme of the Ministry of Food for issuing National Dried Milk began to operate, with the result that the need for the Council's Scheme almost disappeared. Arrangements were made locally for the distribution of National Dried Milk to be made through the Maternity and Child Welfare Clinics of the Local Authority as was the practice under the Council's Scheme.

Milk to the value of £997 1s. 2d. and Maltoline, Virol, Virolax and Emulsion to the value of £322 15s. 6d., making a total cost of £1,319 16s. 8d., was sold or issued free under the Council's Scheme, and under the Ministry of Food Scheme 23,157 packets (20 ounce size) were sold at 1s. 2d. each and 2,194 packets were issued free on an income scale basis.

Institutional Provision for Maternity Cases.—Last year 561 patients were delivered in Walton Hospital at the cost of the Public Assistance Committee, 86 in the Flyde Emergency Institutions, and in addition 124 patients were delivered in voluntary hospitals. The total of 771 represents 49 per cent. of the births registered during the year, as compared with 53 per cent. during 1943.

Maternity Home.—The Municipal Maternity Home remained closed, but the Emergency Maternity Institutions in the Fylde area placed at the disposal of the Council by the Ministry of Health continued to be available as an evacuation provision until December 15th; after that date patients were admitted at a cost to the Council of two guineas per patient-week.

These Maternity Homes were administered by the Lancashire County Council but the nursing supervision was in the hands of Bootle staff, and contact was maintained by monthly visits of members of the Council. During the year 88 patients were admitted.

Puerperal Morbidity and Mortality.—There was one death from puerperal fever, and three deaths were due to other puerperal causes. The circumstances of the confinements were investigated by the Medical Officer of Health, and confidential reports (not identifying the patients) were sent to the Departmental Committee on Maternal Mortality set up by the Ministry of Health.

The deaths thus classified to pregnancy and child-birth give a maternal mortality rate of 2·45 per 1,000 (live and still) births, and although there have been fluctuations in this rate, the local experience is, in general, more favourable than that of the country as a whole.

MUNICIPAL MIDWIFERY SERVICE.

A ninth whole-time midwife was appointed to the Municipal Midwifery Service in September 1944 and this staff attended 739 patients during the year, delivering 684 as midwives and assisting in 55 other instances as maternity nurses. Midwives book their own patients and are responsible for their ante-natal care from that date.

It will be seen that including maternity cases delivered in Walton Hospital and the Fylde Emergency Institutions, the municipality was responsible during 1944 for the conduct of 92 per cent. of the maternity work of the Borough.

CHILD WELFARE.

Notification of Births.—The number of births notified under Section 203 of the Public Health Act, 1936, as adjusted by transferred notifications totalled 1,571 live births and 46 still births.

Births Registered.—The number of live births registered in the district was 737, from which 10 are to be deducted as born in Bootle to residents from other districts, and to which are to be added 847 births to Bootle parents temporarily out of the town; the corrected figure is therefore 1,574. Of the number registered 120 were illegitimate.

The number of still births registered was 51, as against 42 for 1943.

Infant Deaths.—There were 96 deaths of infants under the age of twelve months, which total expressed as a rate of 1,000 births gives an infant mortality rate of 61, compared with 76 during 1943. This is the lowest rate yet recorded in the Borough.

The trend of infant mortality in recent years is set out in the following table:—

Years			BOOTLE	England and Wales
1901-05	...	...	166	138
1906-10	...	...	130	117
1911-15	...	...	133	110
1916-20	...	...	103	91
1921-25	...	...	91	76
1926-30	...	...	89	68
1931-35	...	...	87	62
1936	...	...	68	59
1937	...	...	77	58
1938	...	...	81	53
1939	...	...	65	50
1940	...	...	80	55
1941	...	...	108	59
1942	...	...	72	49
1943	...	...	76	49
1944	...	...	61	46

Mortality was highest during the fourth quarter, with 28 deaths registered as against 35 in the corresponding quarter of 1943. In the first three quarters, 27, 19, and 22 deaths respectively were registered; 53 were males, and 43 females.

The most important of the causes of death were:—pneumonia 25, prematurity 18, diarrhoea and enteritis 13, congenital malformations 8, whooping cough 5, and convulsions 4.

The rate of infantile mortality among legitimate infants was 59, and among illegitimate infants it was 83.

Neo-Natal Mortality.—Twenty-nine children died before they were a week old, and a total of 46, or 48 per cent., of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 18·4 per 1,000 births.

Care of Premature Infants.—In a circular dated 22nd March 1944 the Ministry of Health asked that all practical action should be taken to improve the care of premature infants, and in view of the fact that the mortality rate of infants in their first month is relatively high in the Borough and has not fallen in equal steps with the mortality rates of older infants this problem of the care of premature infants is recognised to have special importance locally. Fortunately Walton Hospital, in which 561 infants were born to Bootle mothers in 1944, has a well-equipped ward and staff for premature infants, and the municipal midwives have been favoured with demonstrations of the technique practised there; further, midwives have been instructed to make special certification of infants in which the birth weight is $5\frac{1}{2}$ lbs. or less. In cases so notified every effort is made to secure a separate bedroom for mother and infant and to provide special equipment including a draught-proof cot with detachable lining, warm suitable clothing, hot water bottles, and special feeding-bottles, and if any of the latter requirements are not available they are provided on loan from the Health Department.

On notification of a premature birth the Assistant Medical Officer of Health gets in touch with the doctor in attendance, and if necessary visits the home to discuss the position with the doctor and the midwife, and before the midwife relinquishes responsibility arrangements are made for the health visitor for the district to take over early supervision.

Public Health (Ophthalmia Neonatorum) Regulations, 1926 to 1937. One case of ophthalmia neonatorum was notified and received hospital treatment, recovering fully, during the year compared with one in 1943.

Home Visitation of Infants.—There are nine officers on the Health visiting staff, some of whom, however, are also engaged in the school medical and tuberculosis services; the establishment is, therefore, equivalent to seven visitors giving their whole time to Maternity and Child Welfare duties in Bootle. This staff paid 20,861 home visits in all, including 8,502 visits to infants under one year, an average of 5·4 visits to each infant.

Supervision of Young Children by Health Visitors.—During the year the Health Visitors paid 9,898 home visits to children from one to five years.

Infant Welfare Clinics.—During the year four infant clinic sessions were conducted weekly.

The following tabular statement gives the numbers of new infants presented for examination and advice, and the total yearly and average attendances at each Clinic:—

Clinic,	New Cases.			Attendances,				Average attendance at clinic.
	Under one year.	One to five years.	Total.	Under one year.	One to five years.	Total.	No. of Sessions	
Health Centres—								
Monday afternoon ..	221	39	260	1749	289	2038	48	42·5
Wednesday afternoon	356	45	401	2793	359	3146	52	60·5
Thursday afternoon ..	176	43	219	1395	165	1560	52	30·0
School Medical Offices—								
Tuesday afternoon ..	313	51	364	2398	293	2691	51	52·8
Totals ...	1066	178	1244	8335	1100	9435	203	46·5

Supply of Cod Liver Oil and Fruit Juices.—The scheme of the Ministry of Food for distribution of fruit juices and cod liver oil to mothers and young children was continued during the year, and this valuable supplement to the vitamin content of their diet is now available, free or on payment, to all expectant mothers and to children up to the age of five years.

During the year the following were the total issues made through the Council's clinics:—

	<i>Infants (0-5 years).</i>		<i>Expectant Mothers.</i>		<i>Totals.</i>				
	<i>Free.</i>	<i>Sold.</i>	<i>Free.</i>	<i>Sold.</i>					
Cod Liver Oil ...	1322	...	6286	...	301	...	787	...	8696
Orange Juice ...	5748	...	49148	...	1247	...	5068	...	61211
Tablets (C.L.O.)	—	...	—	...	330	...	1062	...	1392

The figures show a substantial increase during the year, although in spite of continuous persuasive efforts there remain many mothers who do not avail themselves of this excellent scheme.

Nursing in the Home.—By agreement the services of the Bootle District Nurses' Association are available for the nursing in their own homes of patients suffering from puerperal fever, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, pneumonia, and poliomyelitis. During the year 2,254 visits were paid to 187 cases.

Convalescent Home Provision.—The usual provision was made in the Maternity and Child Welfare Sub-Committee's estimates for grants towards the cost of treatment in convalescent homes for children under the age of five years. During the year, 20 children under five years of age and 106 children over that age received such convalescent treatment.

Child Life Protection.—The powers in respect of the reception of children under the age of nine years for reward conferred on the Council by the Public Health Act, 1936, are administered through the Health Visitors, who supervised the general health and well-being of five such children who were on the register on 31st December 1944.

Care of Illegitimate Children.—The numbers of illegitimate births registered in the Borough in the years from 1937 onwards have been as follows:—63, 46, 49, 47, 51, 69, and 88; and during the year 1944 there were 120.

The special arrangements for the care of illegitimate children outlined in the last Annual Report have now been operating for a full year. They provide for one of the health visitors accepting responsibility for taking all possible and necessary action to help the unmarried mother and to safeguard the illegitimate child, and the year's working has revealed all kinds and degrees of social, moral, and economic problems calling for the maximum of patience, understanding, and knowledge in order that the disabilities of the mother and the child may be reduced to a minimum.

The problems have included as regards the mother—widowhood, marriage to other, than the putative father, feeble-mindedness, hostility of relatives, lack of means of support, lack of housing accommodation; and as regard the putative father—inability to trace, service overseas, death, coloured extraction.

Some 24 cases were referred from ante-natal clinics, 21 from Walton Hospital, and others making 66 in all from welfare agencies or on their own application before the birth of the infants. With these and other cases coming to notice after birth, 107 cases were supervised during the year by means of 1,059 home visits plus 136 private interviews and 46 visits to institutions, home, or factories. The final disposition of the infants was retention by the mother in 77 instances, legal adoption in 17, and by care in institutions or by relatives, or by removal or death in the remainder.

Adoption of Children.—The Adoption of Children (Regulation) Act, 1939, came into operation on 1st June 1943 and since that date it has been an offence for any body of persons (other than a Local Authority) to make any arrangements for the adoption of a child, unless that body is an Adoption Society registered by the Local Authority of the area within which its administrative centre is situated. Further, it is the duty of any person, other than a child's parent or guardian or the person with whom the child is placed, who participates in the arrangements for the placing of the child, to notify in writing the Welfare Authority of the area in which the child is to be placed; it will be the duty of Health Visitors to keep such children under observation whether or not a notice of adoption has in fact been received by this Authority.

It has, however, been pointed out that there remain a number of children for whom adequate supervision has not been secured and the matter is of increasing importance with the rise which has recently occurred in the number of adoptions. It has been advocated with reason that in all cases where parents seek to have their child adopted they should notify the Local Welfare Authority if the child is under 5 or the Local Education Authority if the child is over that age; that similar notification should be made to the Local Authority by persons intending to adopt children; and that the home and the adopting parents should be supervised for a period before a Court order for adoption is made.

The Department co-operates fully with the Lancashire and Cheshire Child Adoption Council, and during the year reports were rendered in respect of three persons intending to adopt children.

Cleanliness of Young Children.—The Health Visitors have continued to devote attention to the education of mothers in the importance of cleanliness and freedom from vermin, and to the examination of heads of children under five years of age, in the homes and in the clinics, concentrating on those homes known to be in most need of help.

The following table sets out the results noted during the year, although in view of the selection made the figures should not be taken as reflecting the general position in the Borough.

(a) INSPECTION IN HOMES.

		0-1 years.	1-3 years.	3-5 years.
Number examined	...	1115	647	687
No. with few " nits "	...	19	93	206
No. with " nits " more numerous	—	...	14	18
No. with lice and " nits "	...	4	13	13

(b) INSPECTION IN CLINICS.

		0-1 years.	1-3 years.	3-5 years.
Number examined	...	692	280	208
No. with few " nits "	...	—	24	25
No. with " nits " more numerous	—	...	4	3
No. with lice and " nits "	...	—	2	3

The Liverpool Child Welfare Association.—This Association has continued to send workers to Bootle on five mornings each week to facilitate the arrangements for dealing with recommendations of the medical staff of the Council or private doctors for the provision of surgical appliances, clothing, fireguards, cod liver oil, extra nourishment, or convalescent home treatment, to infants and school children.

During the year the Association dealt with 178 new cases (58 under 5 years and 120 over 5 years); 126 children were sent to Convalescent Homes, with an average stay in hospital for 20 children under five of 48 days and for 106 over five years of 34 days; in addition 13 babies were admitted to the Royal Liverpool Babies' Hospital, Woolton, with an average stay of 47 days.

The staff paid 4,107 visits and the interviews totalled 1,827.

IX. HOUSING.

Estimate of Housing Needs.—The Annual Report for 1942 gave details under several headings showing that a responsible estimate of present housing needs approximates to 3,000 houses, with an ultimate requirement which will be determined later by the nature and extent of re-planning, of the order of 7,000.

Housing Provision.—The Council has been informed that their allocation of temporary houses is 850, made up of the "Phoenix," "Arcon," and U.S.A. types, and sites, located for the most part in the Borough, have been chosen for erection of these bungalows; to allow, however, for overall deficiency in sites and for possible objections to acquisition of certain of them, other locations have been selected in neighbouring districts.

Inspection of War-Damaged Houses.—In addition to inspection of war damaged houses by the Department of the Borough Engineer, inspections of such houses were made by the Sanitary Inspectors. During the year visits were paid to 47 houses in private ownership in respect of war damage, and a report and recommendation suitable to the conditions found in each case was forwarded to the Borough Engineer for his attention.

Further, 35 houses requisitioned for accommodating families rendered homeless were inspected and reports on conditions found together with recommendations were forwarded to the Town Clerk and the Borough Engineer. In addition, 2 houses were inspected under the Landlord and Tenant (War Damage) Acts, 1939 and 1941, and one certificate was issued.

X. BLIND WELFARE.

The duties of the Council under the Blind Persons Act, 1920, are administered in accordance with a revised scheme and regulations which received the approval of the Minister of Health in April 1934.

Registration.—During the year the Council's Ophthalmic Surgeon held four clinics and examined 13 cases. From this total of 13 examinations 7 cases were added to the register of blind persons; and there were also 11 transfer cases added. Fourteen names were removed, 9 owing to death, and 5 to removal outside the Borough, leaving a total on the register at the end of 1944 of 156 persons as compared with 152 last year.

Employment and Instruction.—The registered blind are assisted and supervised by two Home Teachers giving the whole of their time to this work; during the year the Home Teachers paid 1,068 visits, gave 40 lessons at home, and disbursed the weekly money payments to necessitous cases; in addition, 92 visits were paid to evacuated blind persons in Southport.

During the year efforts were continued in conjunction with the local office of the Ministry of Labour and National Service to obtain employment on work of national importance for selected blind persons. At the end of the year eleven were so employed as a result of these and other efforts.

The Council was on December 31st 1944 assisting 92 unemployable blind (excluding blind evacuees) with money grants at a total weekly cost of £131 16s. 0d., the amount of relief being given varying from 5/6 to 41/6 and 39/- weekly (excluding sighted dependants allowance), for males and females respectively, with the maximum being paid in seven cases (5 males and 2 females). In addition, twelve persons (11 males and one female) are employed at the Blind Workshops.

During the year twenty applications for certification of blindness in order to take advantage of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926, were granted.

Domiciliary Medical Attendance.—In May 1937 the Council instituted a Domiciliary Medical Service for the (non-insured) registered blind by arrangement with local medical practitioners who agreed to enter their names on a panel and to provide medical attendance for a capitation fee of the same amount as that obtaining under the National Health Insurance Acts; necessary prescriptions are dispensed by a similar panel of private chemists. The scheme works smoothly and satisfactorily, and the cost to the Council for the financial year 1944-45 is estimated to be £60 for the 94 persons entitled to benefit.

Provision of Wireless Installations.—Since October 1942 wireless installations have been provided for all blind persons in the Borough either through the local relay service or by battery sets. The service has been much appreciated and the cost to the Council for 1945-1946 is estimated to be £100.

Evacuation of Blind Persons.—At the end of 1944 there were 115 blind persons resident in Bootle out of the 156 on the register; the following statement shows the disposition of the remainder:—

- 17 evacuated under scheme to Southport.
- 2 privately evacuated, or with friends outside Bootle.
- 5 in schools outside Bootle.
- 17 in outside institutions.

At the end of the year 17 of the blind persons evacuated to Southport were accommodated in a detached house suitably adapted and furnished to serve as a Hostel, and one of the two Bootle Home Teachers was seconded for part-time duty to assist in the supervision of their welfare.

Post-War Housing of the Blind.—The proposals outlined in the Annual Report for the provision of hostel accommodation were carried a stage further during the war by the selection of suitable premises which became available in the autumn. Plans were drawn for the adaptation of the premises to serve the dual purpose of a residential hostel and social centre, the latter having hitherto been provided elsewhere in the Borough, and the necessary application for sanction to purchase, adapt, and furnish the building was submitted to the Ministry of Health in March 1945.

APPENDIX 1.

CAUSES OF, AND AGES AT, DEATH DURING THE YEAR 1944.

CAUSES OF DEATH	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS" IN INSTITUTIONS IN THE DISTRICT
	All ages	Under 1 year	1 and under 2 years	2 and under 5 years	5 and under 16 years	16 & under 25 years	25 & under 45 years	45 & under 65 years	65 and upward		
All causes (Certified Uncertified)	728 4	96 —	8 —	9 —	19 —	36 1	62 —	217 2	281 1	123 —	
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	2	...	1	1	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	7	5	2	...	...	...	...	...	...
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	4	...	...	...	...	3	1	...	...
Erysipelas	...	...	1	...	...	...	...	...	1	...	...
Phthisis (Pulmonary Tuberculosis)	56	1	...	...	3	20	16	16	...	...	...
Tuberculous Meningitis	5	1	...	...	3	1	...	...	...	...	...
Other Tuberculous Diseases	3	...	...	...	...	...	2	1	...	...	...
Cancer, malignant disease	102	...	...	...	...	...	9	45	48	6	...
Rheumatic Fever	5	...	...	...	1	2	1	1	...	...	...
Meningitis	78	1	1	2	1	...	...	2	1	2	2
Organic Heart Disease	145	...	...	...	...	1	8	45	91	17	...
Bronchitis	29	3	...	...	1	...	2	8	15	4	...
Pneumonia (all forms)	58	25	1	1	2	1	2	18	8	2	...
Other diseases of respiratory organs	3	...	...	...	...	...	...	...	3	...	...
Diarrhoea and Enteritis	13	13	...	...	...	...	...	...	...	3	...
Appendicitis and Typhlitis	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver	...	...	...	...	...	...	...	...	...	...	...
Alcoholism	...	...	...	...	...	...	...	...	...	...	...
Nephritis and Bright's Disease	18	...	...	...	1	1	2	5	9	2	...
Puerperal Fever	1	...	...	...	...	...	1	...	...	...	...
Other accidents and diseases of Pregnancy and Parturition	3	...	...	...	...	2	1	...	...	...	...
Congenital Debility and Malformation, including Premature Birth	29	27	2	...	...	...	...	...	...	...	...
Violent Deaths, excluding Suicide	33	1	...	3	3	4	3	14	5	40	...
Suicide	4	...	...	...	...	...	1	1	2	3	...
Other Defined Diseases	195	19	4	2	4	5	13	55	96	41	...
Diseases ill defined or unknown	8	...	...	...	...	...	1	5	2	3	...
Totals	732	96	8	9	19	37	62	219	282	123	

SUB-ENTRIES INCLUDED IN ABOVE FIGURES

APPENDIX 2.

INFANT MORTALITY.

1944. Nett Deaths from stated causes at various Ages under One Year of Age.

CAUSES OF DEATH.	All Causes		Under 1 week.	1-2 weeks.	2-3 weeks.	4 weeks and under.	5 months and under.	6 months and under.	9 months and under.	12 months and under.	Total Deaths under One Year.		
	Certified	Uncertified	...	29	7	5	5	46	23	18	6	3	96
Small-pox
Chicken-pox
Measles	5
Scarlet Fever	1
Whooping Cough	1
Diphtheria and Croup	1
Erysipelas	1
Tuberculous Meningitis	1
Abdominal Tuberculosis	1
Other Tuberculous Diseases	1
Meningitis (not Tuberculous)	1
Convulsions	4
Laryngitis	1
Bronchitis	3
Pneumonia (all forms)	25
Diarrhoea	13
Enteritis	1
Gastritis	1
Syphilis	1
Rickets	1
Suffocation, overlying	1
Injury at Birth	1
Atelectasis	5
Congenital Malformations	8
Premature Birth	18
Atrophy, Delibity and Muraasmus	1
Other Causes	11
Totals	29	7	5	5	46	23	18	6	3	96	96	96	

Net Births in the year { legitimate infants ... 1454 illegitimate infants ... 120 Net Deaths in the year { legitimate ... 86 illegitimate ... 10

